

# CLAIMS

What is claimed is:

1. A method for quantitatively evaluating the integrity of a data set recorded on a storage medium, the recorded data set including error-correction codes, the method:
  - comprising at least two of the steps of
    - enumerating data subsets that are unreadable,
    - enumerating data subsets that are erroneously read and uncorrected, and
    - enumerating data subsets that are initially erroneously read and subsequently corrected;
  - and
  - further comprising the step of computing a data integrity rating for the data set using at least one of enumerations of the unreadable data subsets, the erroneously-read-and-uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
2. The method of Claim 1, wherein the storage medium comprises a CD.
3. The method of Claim 1, wherein the storage medium comprises a DVD.
4. A method for quantitatively evaluating the integrity of a data set recorded on a storage medium, the recorded data set including error-correction codes, the method comprising the steps of:
  - enumerating data subsets that are initially erroneously read and subsequently corrected; and
  - computing a data integrity rating for the data set using enumeration of the erroneously-read-and-corrected data subsets.
5. The method of Claim 4, wherein the storage medium comprises a CD.
6. The method of Claim 4, wherein the storage medium comprises a DVD.
7. The method of Claim 4, further comprising the steps of:
  - enumerating data subsets that are unreadable;
  - enumerating data subsets that are erroneously read and uncorrected; and
  - computing a data integrity rating for the data set using at least one of enumerations of the unreadable data subsets, the erroneously-read-and-uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
8. The method of Claim 7, further comprising the steps of:
  - identifying and logging data subsets within the data set that are unreadable, thereby
  - enumerating the unreadable data subsets;

1 identifying and logging data subsets within the data set that are erroneously read and  
2 uncorrected, thereby enumerating the erroneously-read-and-uncorrected data subsets;  
3 and  
4 identifying and logging data subsets within the data set that are initially erroneously read  
5 and subsequently corrected, thereby enumerating the erroneously-read-and-corrected  
6 data subsets.

- 7 9. A method for quantitatively evaluating the integrity of a data set recorded on a storage  
8 medium, the recorded data set including error-correction codes, the method comprising the  
9 steps of:  
10 enumerating data subsets that are initially erroneously read and subsequently corrected, and  
11 measuring an over-sampled rating for the erroneously-read-and-corrected subsets; and  
12 computing a data integrity rating for the data set using at least one of enumeration of  
13 erroneously-read-and-corrected data subsets and the over-sampled rating.  
14 10. The method of Claim 9, wherein the storage medium comprises a CD.  
15 11. The method of Claim 9, wherein the storage medium comprises a DVD.  
16 12. The method of Claim 9, wherein the over-sampled rating is determined by performing the  
17 steps of:  
18 computing a time interval for reading the data subset at a pre-determined readout rate;  
19 measuring a time interval required for reading the data subset at the pre-determined readout  
20 rate; and  
21 computing the over-sampled rating using the measured time interval and the computed time  
22 interval.  
23 13. The method of Claim 9, wherein the over-sampled rating is determined by performing the  
24 steps of:  
25 identifying and logging data subsets within the data set that are initially erroneously read  
26 and subsequently corrected, thereby enumerating the erroneously-read-and-corrected  
27 data subsets;  
28 logging the number of re-reads required to correct erroneously-read-and-corrected data  
29 subsets; and  
30 computing the over-sampled rating using the numbers of re-reads.  
31 14. The method of Claim 9, wherein:

- 1 the over-sampled rating is determined by performing the steps of  
2 identifying and logging data subsets within the data set that are initially erroneously  
3 read and subsequently corrected, thereby enumerating the erroneously-read-and-  
4 corrected data subsets,  
5 logging the number of re-reads required to correct erroneously-read-and-corrected data  
6 subsets, and  
7 computing the over-sampled rating using the numbers of re-reads;  
8 identifying and logging data subsets within the data set that are unreadable, thereby  
9 enumerating the unreadable data subsets;  
10 identifying and logging data subsets within the data set that are erroneously read and  
11 uncorrected, thereby enumerating the erroneously-read-and-uncorrected data subsets;  
12 and  
13 computing a data integrity rating for the data set using at least one of enumerations of the  
14 unreadable data subsets, the erroneously-read-and-uncorrected subsets, and the  
15 erroneously-read-and-corrected data subsets, and the over-sampled rating.
- 16 15. An apparatus for quantitatively evaluating the integrity of a data set recorded on a storage  
17 medium, the recorded data set including error-correction codes, the apparatus comprising:  
18 a readout device adapted for reading the data set recorded on the storage medium; and  
19 a programmed processor operatively coupled to the readout device, the processor being  
20 programmed for performing at least two of the steps of  
21 enumerating data subsets that are unreadable,  
22 enumerating data subsets that are erroneously read and uncorrected, and  
23 enumerating data subsets that are initially erroneously read and subsequently corrected;  
24 and  
25 wherein the processor is further programmed for computing a data integrity rating for the  
26 data set using at least one of enumerations of the unreadable data subsets, the  
27 erroneously-read-and-uncorrected data subsets, and the erroneously-read-and-corrected  
28 data subsets.
- 29 16. The apparatus of Claim 15, wherein the storage medium comprises a CD.  
30 17. The apparatus of Claim 15, wherein the storage medium comprises a DVD.

- 1 18. An apparatus for quantitatively evaluating the integrity of a data set recorded on a storage  
2 medium, the recorded data set including error-correction codes, the apparatus comprising:  
3 a readout device adapted for reading the data set recorded on the storage medium; and  
4 a programmed processor operatively coupled to the readout device, the processor being  
5 programmed for  
6 enumerating data subsets that are initially erroneously read and subsequently corrected;  
7 and  
8 computing a data integrity rating for the data set using enumeration of the erroneously-  
9 read-and-corrected data subsets.
- 10 19. The apparatus of Claim 18, wherein the storage medium comprises a CD.
- 11 20. The apparatus of Claim 18, wherein the storage medium comprises a DVD.
- 12 21. The apparatus of Claim 18, wherein the processor is further programmed for:  
13 enumerating data subsets that are unreadable;  
14 enumerating data subsets that are erroneously read and uncorrected; and  
15 computing a data integrity rating for the data set using at least one of enumerations of the  
16 unreadable data subsets, the erroneously-read-and-uncorrected data subsets, and the  
17 erroneously-read-and-corrected data subsets.
- 18 22. The apparatus of Claim 21, wherein the processor is further programmed for:  
19 identifying and logging data subsets within the data set that are unreadable, thereby  
20 enumerating the unreadable data subsets;  
21 identifying and logging data subsets within the data set that are erroneously read and  
22 uncorrected, thereby enumerating the erroneously-read-and-uncorrected data subsets;  
23 and  
24 identifying and logging data subsets within the data set that are initially erroneously read  
25 and subsequently corrected, thereby enumerating the erroneously-read-and-corrected  
26 data subsets.
- 27 23. An apparatus for quantitatively evaluating the integrity of a data set recorded on a storage  
28 medium, the recorded data set including error-correction codes, the apparatus comprising:  
29 a readout device adapted for reading the data set recorded on the storage medium; and  
30 a programmed processor operatively coupled to the readout device, the processor being  
31 programmed for

1 enumerating data subsets that are initially erroneously read and subsequently corrected,  
2 and  
3 measuring an over-sampled rating for the erroneously-read-and-corrected subsets; and  
4 computing a data integrity rating for the data set using at least one of enumeration of  
5 erroneously-read-and-corrected data subsets and the over-sampled rating.

6 24. The apparatus of Claim 23, wherein the storage medium comprises a CD.

7 25. The apparatus of Claim 23, wherein the storage medium comprises a DVD.

8 26. The apparatus of Claim 23, wherein processor is programmed for determining the over-  
9 sampled rating by:

10 computing a time interval for reading the data subset at a pre-determined readout rate;

11 measuring a time interval required for reading the data subset at the pre-determined readout  
12 rate; and

13 computing the over-sampled rating using the measured time interval and the computed time  
14 interval.

15 27. The apparatus of Claim 23, wherein the processor is programmed for determining the over-  
16 sampled rating by:

17 identifying and logging data subsets within the data set that are initially erroneously read  
18 and subsequently corrected, thereby enumerating the erroneously-read-and-corrected  
19 data subsets;

20 logging the number of re-reads required to correct erroneously-read-and-corrected data  
21 subsets; and

22 computing the over-sampled rating using the numbers of re-reads.

23 28. The apparatus of Claim 23, wherein the processor is further programmed for:

24 determining the over-sampled rating by

25 identifying and logging data subsets within the data set that are initially erroneously  
26 read and subsequently corrected, thereby enumerating the erroneously-read-and-  
27 corrected data subsets,

28 logging the number of re-reads required to correct erroneously-read-and-corrected data  
29 subsets, and

30 computing the over-sampled rating using the numbers of re-reads;

1 identifying and logging data subsets within the data set that are unreadable, thereby  
2 enumerating the unreadable data subsets;  
3 identifying and logging data subsets within the data set that are erroneously read and  
4 uncorrected, thereby enumerating the erroneously-read-and-uncorrected data subsets;  
5 and  
6 computing a data integrity rating for the data set using at least one of enumerations of the  
7 unreadable data subsets, the erroneously-read-and-uncorrected subsets, and the  
8 erroneously-read-and-corrected data subsets, and the over-sampled rating.

- 9 29. A method for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned  
10 recorded data products by a data product re-seller, the method comprising the steps of:  
11 reading data from a data product offered by an owner of the data product;  
12 comparing data read from the data product with data in a data product information database;  
13 identifying the data product, if the data product is identified as being listed in the data  
14 product information database;  
15 quantitatively evaluating the integrity of a data set recorded on the data product and  
16 computing a data integrity rating for the data product;  
17 determining a purchase price for the data product to be offered by the re-seller to the owner  
18 of the data product, the purchase price being determined based on at least one of the  
19 data integrity rating for the data product, inventory information for the data product  
20 from a data product inventory database, order information for the data product in a data  
21 product order database, and previous purchase and re-sale information for the data  
22 product from a data product sales database;  
23 updating inventory information in response to a purchase of the data product from the owner  
24 by the re-seller;  
25 determining a re-sale price for the data product to be offered by the re-seller to a buyer of  
26 the data product, the purchase price being determined based on at least one of the data  
27 integrity rating, inventory information, order information, and previous purchase and re-  
28 sale information; and  
29 updating at least one of inventory information, order information, and sales information in  
30 response to a re-sale of the data product by the re-seller to the buyer.  
31 30. The method of Claim 29, wherein the data product comprises a CD.

- 1 31. The method of Claim 29, wherein the data product comprises a DVD.
- 2 32. The method of Claim 29, wherein the evaluating step:
- 3 comprises at least two of the steps of
- 4 enumerating data subsets that are unreadable,
- 5 enumerating data subsets that are erroneously read and uncorrected, and
- 6 enumerating data subsets that are initially erroneously read and subsequently corrected;
- 7 and
- 8 further comprises the step of computing a data integrity rating for the data set using at least
- 9 one of enumerations of the unreadable data subsets, the erroneously-read-and-
- 10 uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
- 11 33. The method of Claim 29, wherein the data product includes error correction codes, and the
- 12 evaluating step comprises the steps of:
- 13 enumerating data subsets that are initially erroneously read and subsequently corrected; and
- 14 computing a data integrity rating for the data set using enumeration of erroneously-read-
- 15 and-corrected data subsets.
- 16 34. The method of Claim 29, wherein the data product includes error correction codes, and the
- 17 evaluating step comprises the steps of:
- 18 enumerating data subsets that are initially erroneously read and subsequently corrected, and
- 19 determining an over-sampled rating for the erroneously-read-and-corrected subsets; and
- 20 computing a data integrity rating for the data set using at least one of enumeration of the
- 21 erroneously-read-and-correct data subsets and the over-sampled rating.
- 22 35. The method of Claim 29, further comprising the step of prompting a user to enter data
- 23 product information for the data product into the data product information database, if the
- 24 data product is not identified as being listed in the product information database.
- 25 36. The method of Claim 29, wherein:
- 26 the data product is a music CD and the data product databases are music CD databases, and
- 27 the method further comprises at least one of the steps of
- 28 reading and storing in the music CD information database any of track information,
- 29 title, and artist from the CD that is not already stored in the music CD database,

1       prompting a user to scan cover art of the music CD and storing cover art thus scanned  
2       into the music CD information database, if the cover art is not already present in  
3       the music CD database,  
4       prompting a user to scan lyrics of the music CD and storing lyrics thus scanned into the  
5       music CD information database, if the lyrics are not already present in the music  
6       CD database, and  
7       prompting a user to scan liner notes of the music CD and storing liner notes thus  
8       scanned into the music CD information database, if the liner notes are not already  
9       present in the music CD database.

10    37. The method of Claim 29, wherein:

11       the data product is a music CD, and data product information database is a music CD  
12       information database; and  
13       the method further comprises the steps of analyzing music data recorded on tracks of the  
14       music CD to generate unique track identification data therefor and storing the track  
15       identification information in the music CD information database, if the track  
16       identification information is not already present in the music CD information database.

17    38. The method of Claim 29, further comprising the step of enabling the buyer independently to  
18       quantitatively evaluate the integrity of the data set recorded on a re-sold data product and to  
19       compute the data integrity rating for the re-sold data product, thereby enabling the buyer to  
20       verify the data integrity rating of the re-sold data product and compare it to re-seller-  
21       reported data integrity rating.

22    39. A method for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned  
23       recorded data products by a data product re-seller, the method comprising the steps of:  
24       reading data from a data product offered by an owner of the data product;  
25       comparing data read from the data product with data in a data product information database;  
26       identifying the data product, if the data product is identified as being listed in the data  
27       product information database;  
28       quantitatively evaluating the integrity of a data set recorded on the data product and  
29       computing a data integrity rating for the data product;  
30       determining a purchase price for the data product to be offered by the re-seller to the owner  
31       of the data product, the purchase price being determined based on at least one of the



1 data integrity rating for the data product, inventory information for the data product  
2 from a data product inventory database, order information for the data product in a data  
3 product order database, and previous purchase and re-sale information for the data  
4 product from a data product sales database;  
5 updating inventory information in response to a purchase of the data product from the owner  
6 by the re-seller;  
7 determining a re-sale price for the data product to be offered by the re-seller to a buyer of  
8 the data product, the purchase price being determined based on at least one of the data  
9 integrity rating, inventory information, order information, and previous purchase and re-  
10 sale information; and  
11 updating at least one of inventory information, order information, and sales information in  
12 response to a re-sale of the data product by the re-seller to the buyer,  
13 wherein:  
14 the databases receive information from multiple independent data product re-sellers;  
15 the multiple independent product re-sellers may access the databases; and  
16 a data product purchased by a first one of the multiple re-sellers may be made available for  
17 re-sale to a buyer by a second one of the multiple re-sellers.

- 18 40. The method of Claim 39, wherein the evaluating step:  
19 comprises at least two of the steps of  
20 enumerating data subsets that are unreadable,  
21 enumerating data subsets that are erroneously read and uncorrected, and  
22 enumerating data subsets that are initially erroneously read and subsequently corrected;  
23 and  
24 further comprises the step of computing a data integrity rating for the data set using at least  
25 one of enumerations of the unreadable data subsets, the erroneously-read-and-  
26 uncorrected data subsets, and the erroneously-read-and-corrected data subsets.
- 27 41. The method of Claim 39, wherein the data product includes error correction codes, and the  
28 evaluating step comprises the steps of:  
29 enumerating data subsets that are initially erroneously read and subsequently corrected; and  
30 computing a data integrity rating for the data set using enumeration of erroneously-read-  
31 and-corrected data subsets.

- 1 42. The method of Claim 39, wherein the data product includes error correction codes, and the  
2 evaluating step comprises the steps of:  
3 enumerating data subsets that are initially erroneously read and subsequently corrected, and  
4 determining an over-sampled rating for the erroneously-read-and-corrected subsets; and  
5 computing a data integrity rating for the data set using at least one of enumeration of the  
6 erroneously-read-and-correct data subsets and the over-sampled rating.
- 7 43. The method of Claim 39, wherein the data product comprises a CD.
- 8 44. The method of Claim 39, wherein the data product comprises a DVD.
- 9 45. The method of Claim 39, wherein the databases are accessible online to the multiple re-  
10 sellers.
- 11 46. The method of Claim 39, wherein the identity of the first one of the re-sellers may be  
12 concealed from the buyer.
- 13 47. The method of Claim 39, wherein one of the multiple re-sellers may select which others of  
14 the multiple re-sellers may offer for re-sale to buyers data products purchased by the one of  
15 the multiple retailers.
- 16 48. The method of Claim 39, wherein one of the multiple re-sellers may select from which  
17 others of the multiple re-sellers to offer for re-sale to buyers data products purchased by the  
18 others of the multiple retailers.
- 19 49. The method of Claim 39, wherein a data product purchased by the first one of the multiple  
20 re-sellers and re-sold to a buyer by the second one of the multiple re-sellers may be shipped  
21 from the first one of the re-sellers to the second one of the re-sellers for subsequent delivery  
22 to the buyer.
- 23 50. The method of Claim 39, wherein a data product purchased by a first one of the multiple re-  
24 sellers and re-sold to a buyer by a second one of the multiple re-sellers may be shipped from  
25 the first one of the re-sellers directly to the buyer.
- 26 51. The method of Claim 39, wherein:  
27 a buyer may submit to a re-seller a bid for a requested data product, the bid including at least  
28 one of a desired re-sale price and a desired data integrity rating; and  
29 the bid thus submitted may be entered into the data product order database.
- 30 52. A method for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned  
31 recorded data products by a data product re-seller, the method comprising the steps of:

1 reading data from a data product offered by an owner of the data product;  
2 comparing data read from the data product with data in a data product information database;  
3 identifying the data product, if the data product is identified as being listed in the data  
4 product information database;  
5 quantitatively evaluating the integrity of a data set recorded on the data product and  
6 computing a data integrity rating for the data product;  
7 determining a purchase price for the data product to be offered by the re-seller to the owner  
8 of the data product, the purchase price being determined based on at least one of the  
9 data integrity rating for the data product, inventory information for the data product  
10 from a data product inventory database, order information for the data product in a data  
11 product order database, and previous purchase and re-sale information for the data  
12 product from a data product sales database;  
13 updating inventory information in response to a purchase of the data product from the owner  
14 by the re-seller;  
15 updating inventory information in response to a purchase of the data product from the owner  
16 by the re-seller;  
17 updating at least one of inventory information, order information, and sales information in  
18 response to a re-sale of the data product by the re-seller to the buyer,  
19 wherein:  
20 the databases receive information from multiple independent data product re-sellers;  
21 the multiple independent product re-sellers may access the databases;  
22 a data product purchased by a first one of the multiple re-sellers may be made available for  
23 re-sale to a buyer by a second one of the multiple re-sellers;  
24 the multiple re-sellers may deliver purchased data products to a pre-owned data product  
25 distributor;  
26 the distributor may access and update at least one of inventory information, order  
27 information, and sales information; and  
28 a data product re-sold to a buyer by a re-seller may be delivered from the distributor.

29 53. The method of Claim 52, wherein the evaluating step:  
30 comprises at least two of the steps of  
31 enumerating data subsets that are unreadable,

1 enumerating data subsets that are erroneously read and uncorrected, and  
2 enumerating data subsets that are initially erroneously read and subsequently corrected;  
3 and

4 further comprises the step of computing a data integrity rating for the data set using at least  
5 one of enumerations of the unreadable data subsets, the erroneously-read-and-  
6 uncorrected data subsets, and the erroneously-read-and-corrected data subsets.

7 54. The method of Claim 52, wherein the data product includes error correction codes, and the  
8 evaluating step comprises the steps of:  
9 enumerating data subsets that are initially erroneously read and subsequently corrected; and  
10 computing a data integrity rating for the data set using enumeration of erroneously-read-  
11 and-corrected data subsets.

12 55. The method of Claim 52, wherein the data product includes error correction codes, and the  
13 evaluating step comprises the steps of:  
14 enumerating data subsets that are initially erroneously read and subsequently corrected, and  
15 determining an over-sampled rating for the erroneously-read-and-corrected subsets; and  
16 computing a data integrity rating for the data set using at least one of enumeration of the  
17 erroneously-read-and-correct data subsets and the over-sampled rating.

18 56. The method of Claim 52, wherein the data product comprises a CD.

19 57. The method of Claim 52, wherein the data product comprises a DVD.

20 58. The method of Claim 52, wherein the databases are accessible online to the multiple re-  
21 sellers and the distributor.

22 59. The method of Claim 52, wherein the distributor may request delivery of selected data  
23 products from the multiple re-sellers, the data products being selected based on at least one  
24 of inventory information, order information, and sales information.

25 60. A system for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned  
26 recorded data products by a data product re-seller, the system:  
27 comprises at least one of

28 a data product information database containing data product information,  
29 a data product inventory data base containing inventory information,  
30 a data product order database containing order information, and  
31 a data product sales database containing sales information;

1 and further comprises

2 a readout device adapted for reading a data set recorded on the data product, and

3 a programmed processor operatively linked to the databases and the readout device,

4 wherein the processor is programmed for:

5 reading data from a data product offered by an owner of the data product;

6 comparing data read from the data product with data in the data product information

7 database;

8 identifying the data product, if the data product is identified as being listed in the data

9 product information database;

10 quantitatively evaluating the integrity of the data set recorded on the data product and

11 computing a data integrity rating for the data product;

12 determining a purchase price for the data product to be offered by the re-seller to the owner

13 of the data product, the purchase price being determined based on at least one of the

14 data integrity rating for the data product, inventory information, order information, and

15 previous purchase and re-sale information;

16 updating inventory information in response to a purchase of the data product from the owner

17 by the re-seller;

18 determining a re-sale price for the data product to be offered by the re-seller to a buyer of

19 the data product, the purchase price being determined based on at least one of the data

20 integrity rating, inventory information, order information, and previous purchase and re-

21 sale information; and

22 updating at least one of inventory information, order information, and sales information in

23 response to a re-sale of the data product by the re-seller to the buyer.

24 61. The system of Claim 60, wherein the data product comprises a CD.

25 62. The system of Claim 60, wherein the data product comprises a DVD.

26 63. The system of Claim 60, wherein the evaluating step:

27 comprises at least two of the steps of

28 enumerating data subsets that are unreadable,

29 enumerating data subsets that are erroneously read and uncorrected, and

30 enumerating data subsets that are initially erroneously read and subsequently corrected;

31 and

1 further comprises the step of computing a data integrity rating for the data set using at least  
2 one of enumerations of the unreadable data subsets, the erroneously-read-and-  
3 uncorrected data subsets, and the erroneously-read-and-corrected data subsets.

4 64. The system of Claim 60, wherein the data product includes error correction codes, and the  
5 evaluating step comprises the steps of:  
6 enumerating data subsets that are initially erroneously read and subsequently corrected; and  
7 computing a data integrity rating for the data set using enumeration of erroneously-read-  
8 and-corrected data subsets.

9 65. The system of Claim 60, wherein the data product includes error correction codes, and the  
10 evaluating step comprises the steps of:  
11 enumerating data subsets that are initially erroneously read and subsequently corrected, and  
12 determining an over-sampled rating for the erroneously-read-and-corrected subsets; and  
13 computing a data integrity rating for the data set using at least one of enumeration of the  
14 erroneously-read-and-correct data subsets and the over-sampled rating.

15 66. The system of Claim 60, wherein the processor is further programmed for prompting a user  
16 to enter data product information for the data product into the data product information  
17 database, if the data product is not identified as being listed in the product information  
18 database.

19 67. The system of Claim 60, wherein:  
20 the data product is a music CD and the data product databases are music CD databases, and  
21 the processor is further programmed for  
22 reading and storing in the music CD information database any of track information,  
23 title, and artist from the CD that is not already stored in the music CD database,  
24 prompting a user to scan cover art of the music CD and storing cover art thus scanned  
25 into the music CD information database, if the cover art is not already present in  
26 the music CD database,  
27 prompting a user to scan lyrics of the music CD and storing lyrics thus scanned into the  
28 music CD information database, if the lyrics are not already present in the music  
29 CD database, and

1           prompting a user to scan liner notes of the music CD and storing liner notes thus  
2           scanned into the music CD information database, if the liner notes are not already  
3           present in the music CD database.

4   68. The system of Claim 60, wherein:

5       the data product is a music CD, and data product information database is a music CD  
6       information database; and

7       the processor is further programmed for analyzing music data recorded on tracks of the  
8       music CD to generate unique track identification data therefor and storing the track  
9       identification information in the music CD information database, if the track  
10      identification information is not already present in the music CD information database.

11   69. The system of Claim 60, wherein the processor is further programmed for enabling the  
12      buyer independently to quantitatively evaluate the integrity of the data set recorded on a re-  
13      sold data product and to compute the data integrity rating for the re-sold data product,  
14      thereby enabling the buyer to verify the data integrity rating of the re-sold data product and  
15      compare it to re-seller-reported data integrity rating.

16   70. A system for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned  
17      recorded data products by a data product re-seller, the system:  
18      comprises at least one of

19          a data product information database containing data product information,

20          a data product inventory data base containing inventory information,

21          a data product order database containing order information, and

22          a data product sales database containing sales information;

23      and further comprises

24          a readout device adapted for reading a data set recorded on the data product, and

25          a programmed processor operatively linked to the databases and the readout device,

26      wherein the processor is programmed for:

27          reading data from a data product offered by an owner of the data product;

28          comparing data read from the data product with data in the data product information  
29          database;

30          identifying the data product, if the data product is identified as being listed in the data  
31          product information database;

1 quantitatively evaluating the integrity of the data set recorded on the data product and  
 2 computing a data integrity rating for the data product;  
 3 determining a purchase price for the data product to be offered by the re-seller to the owner  
 4 of the data product, the purchase price being determined based on at least one of the  
 5 data integrity rating for the data product, inventory information, order information, and  
 6 previous purchase and re-sale information;  
 7 updating inventory information in response to a purchase of the data product from the owner  
 8 by the re-seller;  
 9 determining a re-sale price for the data product to be offered by the re-seller to a buyer of  
 10 the data product, the purchase price being determined based on at least one of the data  
 11 integrity rating, inventory information, order information, and previous purchase and re-  
 12 sale information;  
 13 updating at least one of inventory information, order information, and sales information in  
 14 response to a re-sale of the data product by the re-seller to the buyer;  
 15 enabling the databases to receive information from multiple independent data product re-  
 16 sellers;  
 17 enabling the multiple independent product re-sellers to access the databases; and  
 18 enabling a data product purchased by a first one of the multiple re-sellers to be made  
 19 available for re-sale to a buyer by a second one of the multiple re-sellers.

20 71. The system of Claim 70, wherein the evaluating step:

21 comprises at least two of the steps of  
 22 enumerating data subsets that are unreadable,  
 23 enumerating data subsets that are erroneously read and uncorrected, and  
 24 enumerating data subsets that are initially erroneously read and subsequently corrected;  
 25 and  
 26 further comprises the step of computing a data integrity rating for the data set using at least  
 27 one of enumerations of the unreadable data subsets, the erroneously-read-and-  
 28 uncorrected data subsets, and the erroneously-read-and-corrected data subsets.

29 72. The system of Claim 70, wherein the data product includes error correction codes, and the  
 30 evaluating step comprises the steps of:

31 enumerating data subsets that are initially erroneously read and subsequently corrected; and



1 computing a data integrity rating for the data set using enumeration of erroneously-read-  
2 and-corrected data subsets.

3 73. The system of Claim 70, wherein the data product includes error correction codes, and the  
4 evaluating step comprises the steps of:  
5 enumerating data subsets that are initially erroneously read and subsequently corrected, and  
6 determining an over-sampled rating for the erroneously-read-and-corrected subsets; and  
7 computing a data integrity rating for the data set using at least one of enumeration of the  
8 erroneously-read-and-correct data subsets and the over-sampled rating.

9 74. The system of Claim 70, wherein the data product comprises a CD.

10 75. The system of Claim 70, wherein the data product comprises a DVD.

11 76. The system of Claim 70, wherein the databases are accessible online to the multiple re-  
12 sellers.

13 77. The system of Claim 70, wherein the processor is further programmed for enabling  
14 concealment of the identity of the first one of the re-sellers from the buyer.

15 78. The system of Claim 70, wherein the processor is further programmed for enabling one of  
16 the multiple re-sellers to select which others of the multiple re-sellers may offer for re-sale  
17 to buyers data products purchased by the one of the multiple retailers.

18 79. The system of Claim 70, wherein the processor is further programmed for enabling one of  
19 the multiple re-sellers to select from which others of the multiple re-sellers to offer for re-  
20 sale to buyers data products purchased by the others of the multiple retailers.

21 80. The system of Claim 70, wherein the processor is further programmed for enabling a data  
22 product purchased by the first one of the multiple re-sellers and re-sold to a buyer by the  
23 second one of the multiple re-sellers to be shipped from the first one of the re-sellers to the  
24 second one of the re-sellers for subsequent delivery to the buyer.

25 81. The system of Claim 70, wherein the processor is further programmed for enabling a data  
26 product purchased by a first one of the multiple re-sellers and re-sold to a buyer by a second  
27 one of the multiple re-sellers to be shipped from the first one of the re-sellers directly to the  
28 buyer.

29 82. The system of Claim 70, wherein the processor is further programmed for enabling:  
30 a buyer to submit to a re-seller a bid for a requested data product, the bid including at least  
31 one of a desired re-sale price and a desired data integrity rating; and

1 the bid thus submitted to be entered into the data product sales database.

2 83. A system for acquisition, evaluation, inventory, distribution, and re-sale of pre-owned  
3 recorded data products by a data product re-seller, the system:

4 comprises at least one of

5 a data product information database containing data product information,

6 a data product inventory data base containing inventory information,

7 a data product order database containing order information, and

8 a data product sales database containing sales information;

9 and further comprises

10 a readout device adapted for reading a data set recorded on the data product, and

11 a programmed processor operatively linked to the databases and the readout device,

12 wherein the processor is programmed for:

13 reading data from a data product offered by an owner of the data product;

14 comparing data read from the data product with data in the data product information  
15 database;

16 identifying the data product, if the data product is identified as being listed in the data  
17 product information database;

18 quantitatively evaluating the integrity of the data set recorded on the data product and  
19 computing a data integrity rating for the data product;

20 determining a purchase price for the data product to be offered by the re-seller to the owner  
21 of the data product, the purchase price being determined based on at least one of the  
22 data integrity rating for the data product, inventory information, order information, and  
23 previous purchase and re-sale information;

24 updating inventory information in response to a purchase of the data product from the owner  
25 by the re-seller;

26 determining a re-sale price for the data product to be offered by the re-seller to a buyer of  
27 the data product, the purchase price being determined based on at least one of the data  
28 integrity rating, inventory information, order information, and previous purchase and re-  
29 sale information;

30 updating at least one of inventory information, order information, and sales information in  
31 response to a re-sale of the data product by the re-seller to the buyer;

1 enabling the databases to receive information from multiple independent data product re-  
2 sellers;  
3 enabling the multiple independent product re-sellers to access the databases;  
4 enabling a data product purchased by a first one of the multiple re-sellers to be made  
5 available for re-sale to a buyer by a second one of the multiple re-sellers;  
6 enabling the multiple re-sellers to deliver purchased data products to a pre-owned data  
7 product distributor;  
8 enabling the distributor to access and update at least one of inventory information, order  
9 information, and sales information; and  
10 enabling a data product re-sold to a buyer by a re-seller to be delivered from the distributor.

11 84. The system of Claim 83, wherein the evaluating step:

12 comprises at least two of the steps of

13 enumerating data subsets that are unreadable,

14 enumerating data subsets that are erroneously read and uncorrected, and

15 enumerating data subsets that are initially erroneously read and subsequently corrected;

16 and

17 further comprises the step of computing a data integrity rating for the data set using at least

18 one of enumerations of the unreadable data subsets, the erroneously-read-and-

19 uncorrected data subsets, and the erroneously-read-and-corrected data subsets.

20 85. The system of Claim 83, wherein the data product includes error correction codes, and the  
21 evaluating step comprises the steps of:

22 enumerating data subsets that are initially erroneously read and subsequently corrected; and

23 computing a data integrity rating for the data set using enumeration of erroneously-read-

24 and-corrected data subsets.

25 86. The system of Claim 83, wherein the data product includes error correction codes, and the  
26 evaluating step comprises the steps of:

27 enumerating data subsets that are initially erroneously read and subsequently corrected, and

28 determining an over-sampled rating for the erroneously-read-and-corrected subsets; and

29 computing a data integrity rating for the data set using at least one of enumeration of the

30 erroneously-read-and-correct data subsets and the over-sampled rating.

31 87. The system of Claim 83, wherein the data product comprises a CD.

- 1 88. The system of Claim 83, wherein the data product comprises a DVD.
- 2 89. The system of Claim 83, wherein the databases are accessible online to the multiple re-
- 3 sellers.
- 4 90. The system of Claim 83, wherein the processor is further programmed for enabling the
- 5 distributor to request delivery of selected data products from the multiple re-sellers, the data
- 6 products being selected based on at least one of inventory information, order information,
- 7 and sales information.
- 8 91. A method for evaluation and sale of a pre-owned recorded data product by an owner of the
- 9 data product to a buyer, the method comprising the steps of:
- 10 reading data from a data product offered for sale by an owner of the data product;
- 11 comparing data read from the data product with data in a data product information database;
- 12 identifying the data product, if the data product is identified as being listed in the data
- 13 product information database;
- 14 quantitatively evaluating the integrity of a data set recorded on the data product and
- 15 computing a data integrity rating for the data product;
- 16 determining a sale price for the data product to be offered by the owner to the buyer, the
- 17 purchase price being determined based on at least one of the data integrity rating for the
- 18 data product, inventory information for the data product from a data product inventory
- 19 database, order information for the data product in a data product order database, and
- 20 previous purchase and re-sale information for the data product from a data product sales
- 21 database;
- 22 updating inventory information in response to an offer to sell the data product by the owner;
- 23 and
- 24 updating at least one of inventory information, order information, and sales information in
- 25 response to sale of the data product by the owner to the buyer.
- 26 92. The method of Claim 91, wherein the data product comprises a CD.
- 27 93. The method of Claim 91, wherein the data product comprises a DVD.
- 28 94. The method of Claim 91, wherein the evaluating step:
- 29 comprises at least two of the steps of
- 30 enumerating data subsets that are unreadable,
- 31 enumerating data subsets that are erroneously read and uncorrected, and

1 enumerating data subsets that are initially erroneously read and subsequently corrected;  
2 and

3 further comprises the step of computing a data integrity rating for the data set using at least  
4 one of enumerations of the unreadable data subsets, the erroneously-read-and-  
5 uncorrected data subsets, and the erroneously-read-and-corrected data subsets.

6 95. The method of Claim 91, wherein the data product includes error correction codes, and the  
7 evaluating step comprises the steps of:  
8 enumerating data subsets that are initially erroneously read and subsequently corrected; and  
9 computing a data integrity rating for the data set using enumeration of erroneously-read-  
10 and-corrected data subsets.

11 96. The method of Claim 91, wherein the data product includes error correction codes, and the  
12 evaluating step comprises the steps of:  
13 enumerating data subsets that are initially erroneously read and subsequently corrected, and  
14 determining an over-sampled rating for the erroneously-read-and-corrected subsets; and  
15 computing a data integrity rating for the data set using at least one of enumeration of the  
16 erroneously-read-and-correct data subsets and the over-sampled rating.

17 97. The method of Claim 91, further comprising the step of prompting the owner to enter data  
18 product information for the data product into the data product information database, if the  
19 data product is not identified as being listed in the product information database.

20 98. The method of Claim 91, wherein:  
21 the data product is a music CD and the data product databases are music CD databases, and  
22 the method further comprises at least one of the steps of  
23 reading and storing in the music CD information database any of track information,  
24 title, and artist from the CD that is not already stored in the music CD database,  
25 prompting the owner to scan cover art of the music CD and storing cover art thus  
26 scanned into the music CD information database, if the cover art is not already  
27 present in the music CD database,  
28 prompting the owner to scan lyrics of the music CD and storing lyrics thus scanned into  
29 the music CD information database, if the lyrics are not already present in the  
30 music CD database, and

1           prompting the owner to scan liner notes of the music CD and storing liner notes thus  
2           scanned into the music CD information database, if the liner notes are not already  
3           present in the music CD database.

4   99. The method of Claim 91, wherein:

5       the data product is a music CD, and data product information database is a music CD  
6       information database; and

7       the method further comprises the steps of analyzing music data recorded on tracks of the  
8       music CD to generate unique track identification data therefor and storing the track  
9       identification information in the music CD information database, if the track  
10      identification information is not already present in the music CD information database.

11   100. The method of Claim 91, wherein the owner and the buyer may access the databases online.

12   101. A system for evaluation and sale of a pre-owned recorded data product by an owner of the  
13   data product to a buyer, the system:

14   comprises at least one of

15       a data product information database containing data product information,

16       a data product inventory data base containing inventory information,

17       a data product order database containing order information, and

18       a data product sales database containing sales information;

19   and further comprises

20       a readout device adapted for reading a data set recorded on the data product, and

21       a programmed processor operatively linked to the databases and the readout device,

22   wherein the processor is programmed for:

23       reading data from a data product offered by an owner of the data product;

24       comparing data read from the data product with data in the data product information  
25       database;

26       identifying the data product, if the data product is identified as being listed in the data  
27       product information database;

28       quantitatively evaluating the integrity of the data set recorded on the data product and  
29       computing a data integrity rating for the data product;

30       determining a sale price for the data product to be offered by the owner to the buyer, the

31       purchase price being determined based on at least one of the data integrity rating for the

1 data product, inventory information, order information, and previous purchase and re-  
2 sale information;

3 updating inventory information in response to an offer to sell the data product by the owner;  
4 and

5 updating at least one of inventory information, order information, and sales information in  
6 response to sale of the data product by the owner to the buyer.

7 102. The system of Claim 101, wherein the data product comprises a CD.

8 103. The system of Claim 101, wherein the data product comprises a DVD.

9 104. The system of Claim 101, wherein the evaluating step:

10 comprises at least two of the steps of

11 enumerating data subsets that are unreadable,

12 enumerating data subsets that are erroneously read and uncorrected, and

13 enumerating data subsets that are initially erroneously read and subsequently corrected;

14 and

15 further comprises the step of computing a data integrity rating for the data set using at least  
16 one of enumerations of the unreadable data subsets, the erroneously-read-and-  
17 uncorrected data subsets, and the erroneously-read-and-corrected data subsets.

18 105. The system of Claim 101, wherein the data product includes error correction codes, and the  
19 evaluating step comprises the steps of:

20 enumerating data subsets that are initially erroneously read and subsequently corrected; and

21 computing a data integrity rating for the data set using enumeration of erroneously-read-  
22 and-corrected data subsets.

23 106. The system of Claim 101, wherein the data product includes error correction codes, and the  
24 evaluating step comprises the steps of:

25 enumerating data subsets that are initially erroneously read and subsequently corrected, and

26 determining an over-sampled rating for the erroneously-read-and-corrected subsets; and

27 computing a data integrity rating for the data set using at least one of enumeration of the  
28 erroneously-read-and-correct data subsets and the over-sampled rating.

29 107. The system of Claim 101, wherein the processor is further programmed for prompting a user  
30 to enter data product information for the data product into the data product information

1 database, if the data product is not identified as being listed in the product information  
2 database.

3 108. The system of Claim 101, wherein:

4 the data product is a music CD and the data product databases are music CD databases, and  
5 the processor is further programmed for  
6 reading and storing in the music CD information database any of track information,  
7 title, and artist from the CD that is not already stored in the music CD database,  
8 prompting the owner to scan cover art of the music CD and storing cover art thus  
9 scanned into the music CD information database, if the cover art is not already  
10 present in the music CD database,  
11 prompting the owner to scan lyrics of the music CD and storing lyrics thus scanned into  
12 the music CD information database, if the lyrics are not already present in the  
13 music CD database, and  
14 prompting the owner to scan liner notes of the music CD and storing liner notes thus  
15 scanned into the music CD information database, if the liner notes are not already  
16 present in the music CD database.

17 109. The system of Claim 101, wherein:

18 the data product is a music CD, and data product information database is a music CD  
19 information database; and  
20 the processor is further programmed for analyzing music data recorded on tracks of the  
21 music CD to generate unique track identification data therefor and storing the track  
22 identification information in the music CD information database, if the track  
23 identification information is not already present in the music CD information database.

24 110. The system of Claim 101, wherein the owner and the buyer may access the databases online.

25 111. A method for generating a data product information database, comprising the steps of:

26 reading data from a data product owned by an owner of the data product;  
27 comparing data read from the data product with data in a data product information database;  
28 identifying the data product, if the data product is identified as being listed in the data  
29 product information database;  
30 quantitatively evaluating the integrity of a data set recorded on the data product and  
31 computing a data integrity rating for the data product;



1 providing the data integrity rating to the owner; and  
2 storing additional data product information read from the data product in the data product  
3 information database.

4 112. The method of Claim 111, wherein the data product comprises a CD.

5 113. The method of Claim 111, wherein the data product comprises a DVD.

6 114. The method of Claim 111, wherein the evaluating step:

7 comprises at least two of the steps of

8 enumerating data subsets that are unreadable,

9 enumerating data subsets that are erroneously read and uncorrected, and

10 enumerating data subsets that are initially erroneously read and subsequently corrected;

11 and

12 further comprises the step of computing a data integrity rating for the data set using at least

13 one of enumerations of the unreadable data subsets, the erroneously-read-and-

14 uncorrected data subsets, and the erroneously-read-and-corrected data subsets.

15 115. The method of Claim 111, wherein the data product includes error correction codes, and the  
16 evaluating step comprises the steps of:

17 enumerating data subsets that are initially erroneously read and subsequently corrected; and

18 computing a data integrity rating for the data set using enumeration of erroneously-read-  
19 and-corrected data subsets.

20 116. The method of Claim 111, wherein the data product includes error correction codes, and the  
21 evaluating step comprises the steps of:

22 enumerating data subsets that are initially erroneously read and subsequently corrected, and

23 determining an over-sampled rating for the erroneously-read-and-corrected subsets; and

24 computing a data integrity rating for the data set using at least one of enumeration of the  
25 erroneously-read-and-correct data subsets and the over-sampled rating.

26 117. The method of Claim 111, further comprising the step of prompting the owner to enter data  
27 product information for the data product into the data product information database, if the  
28 data product is not identified as being listed in the product information database.

29 118. The method of Claim 111, wherein:

30 the data product is a music CD and the data product databases are music CD databases, and

31 the method further comprises at least one of the steps of

1 reading and storing in the music CD information database any of track information,  
2 title, and artist from the CD that is not already stored in the music CD database,  
3 prompting the owner to scan cover art of the music CD and storing cover art thus  
4 scanned into the music CD information database, if the cover art is not already  
5 present in the music CD database,  
6 prompting the owner to scan lyrics of the music CD and storing lyrics thus scanned into  
7 the music CD information database, if the lyrics are not already present in the  
8 music CD database, and  
9 prompting the owner to scan liner notes of the music CD and storing liner notes thus  
10 scanned into the music CD information database, if the liner notes are not already  
11 present in the music CD database.

12 119. The method of Claim 111, wherein:

13 the data product is a music CD, and the data product information database is a music CD  
14 information database; and  
15 the method further comprises the steps of analyzing music data recorded on tracks of the  
16 music CD to generate unique track identification data therefor and storing the track  
17 identification information in the music CD information database, if the track  
18 identification information is not already present in the music CD information database.

19 120. The method of Claim 111, wherein the data product information database is accessed online.

20 121. The method of Claim 120, wherein:

21 a readout device for evaluating the integrity of the data set operatively linked online to the  
22 data product information database; and  
23 the additional data product information is transmitted online from the readout device to the  
24 data product information database.

25 122. A system for generating a data product information database, comprising:

26 a data product information database;  
27 a readout device adapted for reading a data set recorded on the data product; and  
28 a programmed processor operatively linked to the database and the readout device,  
29 wherein the processor is programmed for:  
30 reading data from a data product owned by an owner of the data product;  
31 comparing data read from the data product with data in a data product information database;

1 identifying the data product, if the data product is identified as being listed in the data  
2 product information database;  
3 quantitatively evaluating the integrity of a data set recorded on the data product and  
4 computing a data integrity rating for the data product;  
5 providing the data integrity rating to the owner; and  
6 storing additional data product information read from the data product in the data product  
7 information database.

8 123. The system of Claim 122, wherein the data product comprises a CD.

9 124. The system of Claim 122, wherein the data product comprises a DVD.

10 125. The system of Claim 122, wherein the evaluating step:

11 comprises at least two of the steps of

12 enumerating data subsets that are unreadable,

13 enumerating data subsets that are erroneously read and uncorrected, and

14 enumerating data subsets that are initially erroneously read and subsequently corrected;

15 and

16 further comprises the step of computing a data integrity rating for the data set using at least

17 one of enumerations of the unreadable data subsets, the erroneously-read-and-

18 uncorrected data subsets, and the erroneously-read-and-corrected data subsets.

19 126. The system of Claim 122, wherein the data product includes error correction codes, and the  
20 evaluating step comprises the steps of:

21 enumerating data subsets that are initially erroneously read and subsequently corrected; and

22 computing a data integrity rating for the data set using enumeration of erroneously-read-

23 and-corrected data subsets.

24 127. The system of Claim 122, wherein the data product includes error correction codes, and the  
25 evaluating step comprises the steps of:

26 enumerating data subsets that are initially erroneously read and subsequently corrected, and

27 determining an over-sampled rating for the erroneously-read-and-corrected subsets; and

28 computing a data integrity rating for the data set using at least one of enumeration of the

29 erroneously-read-and-correct data subsets and the over-sampled rating.

30 128. The system of Claim 122, wherein the processor is further programmed for prompting the  
31 owner to enter data product information for the data product into the data product

1 information database, if the data product is not identified as being listed in the product  
2 information database.

3 129. The system of Claim 122, wherein:

4 the data product is a music CD and the data product databases are music CD databases, and  
5 the processor is further programmed for  
6 reading and storing in the music CD information database any of track information,  
7 title, and artist from the CD that is not already stored in the music CD database,  
8 prompting the owner to scan cover art of the music CD and storing cover art thus  
9 scanned into the music CD information database, if the cover art is not already  
10 present in the music CD database,  
11 prompting the owner to scan lyrics of the music CD and storing lyrics thus scanned into  
12 the music CD information database, if the lyrics are not already present in the  
13 music CD database, and  
14 prompting the owner to scan liner notes of the music CD and storing liner notes thus  
15 scanned into the music CD information database, if the liner notes are not already  
16 present in the music CD database.

17 130. The system of Claim 122, wherein:

18 the data product is a music CD, and the data product information database is a music CD  
19 information database; and  
20 the processor is further programmed for analyzing music data recorded on tracks of the  
21 music CD to generate unique track identification data therefor and storing the track  
22 identification information in the music CD information database, if the track  
23 identification information is not already present in the music CD information database.

24 131. The system of Claim 122, wherein the data product information database is accessed online.

25 132. The system of Claim 131, wherein:

26 the readout device for evaluating the integrity of the data set operatively linked online to at  
27 least one of the data product information database and the programmed processor; and  
28 the additional data product information is transmitted online from the readout device to the  
29 data product information database.